

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Work Order ID 152015

Tuesday, October 18, 2016 1:43:52 PM

152015

Page 2

Item ID: D4617-7

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Clamp Half

Start Date: 10/21/2016 Start Qty: 20.00

20

Cust Item ID:

Required Date: 10/27/2016 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.03

Quality Control

20

4

DAS

45

9-89

16-10-21

130

QC8- Inspect parts - second check

0.00

130

QC

Memo

0.07

Quality Control

20

Ø

DAS

49

9-89

16/10/22

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.10

Hand Finishing

x20

Ø

2016/10/24

BEB

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐				Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐				Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐				Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐											
		OTHER :																							

Work Order ID 152015

Tuesday, October 18, 2016 1:43:52 PM

152015

Page 3

Item ID: D4617-7 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Clamp Half
Start Date: 10/21/2016 Start Qty: 20.00 ***20*** Cust Item ID:
Required Date: 10/27/2016 Req'd Qty: 20.00 ***20*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC7-Inspect Chemical Conversion Coat	0.00							DAS 38 9-89
150						20			
QC	Memo	0.03							
Quality Control									OCT 25 2016
160	Identify as per dwg & Stock Location	0.00							68-9 26 SVQ
160						20x			OCT 25 2016
Packaging	Memo	0.03							
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
170									
QC	Memo	0.33							
Quality Control									16/10/26 dJ

DAS
21
9-89

OCT 25 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Tuesday, October 18, 2016 1:43:55 PM

Page 1

Work Order ID: 152015

152015

Parent Item: D4617-7

D4617-7

Parent Item Name: Clamp Half

Start Date: 10/21/2016

Required Date: 10/27/2016

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP REV: A NEW ISSUE 12-04-12 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B0.625X01.50 0		Purchased	No				f	9.6000		3.326316			

M6061T6B0 625X01 500

6061-T6 Bar .625 x 1.50

3.375'

DAS
20
9-89

16-10-19

Location

Loc Qty

Loc Code

MAT002

9.6

m129167

9.6

3.375'

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

DART AEROSPACE LTD		Work Order:	152015
Description: Clamp Half		Part Number:	D4617-7
Inspection Dwg: D4617	Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[illegible]

Measured by: 45 9-89	Audited by: 49 9-89	Preliminary Approval:
Date: 16-10-21	Date: 16/10/23	Date:

Rev	Date	Change	Revised by	Approved
A	12.05.15	New Issue	KJ	
B	13.02.27	Dwg Rev updated	KJ	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



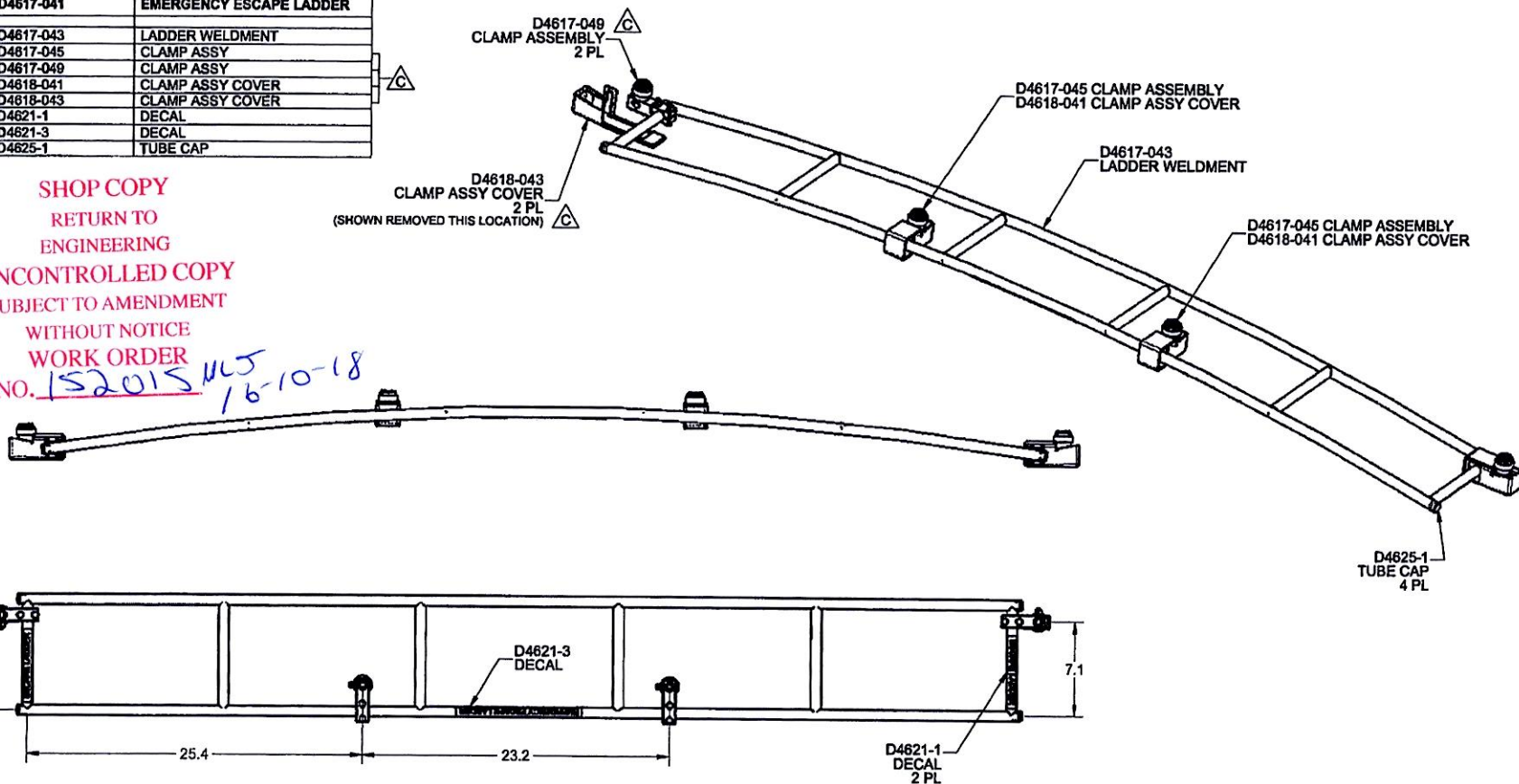
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐				
Date :	Step #:	QTY Effective :			MRB (QSI042) Approval	
Description Work Order Deviation		Disposition				
					Completed By	
					Lead hand / Supervisor Approval Verification	
					QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : _____						

ITEM	QTY	P/N	DESCRIPTION
	X	D4617-041	EMERGENCY ESCAPE LADDER
1	1	D4617-043	LADDER WELDMENT
2	2	D4617-045	CLAMP ASSY
3	2	D4617-049	CLAMP ASSY
4	2	D4618-041	CLAMP ASSY COVER
5	2	D4618-043	CLAMP ASSY COVER
6	2	D4621-1	DECAL
7	1	D4621-3	DECAL
8	4	D4625-1	TUBE CAP

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 152015 16-10-18



D4617-041 EMERGENCY ESCAPE LADDER
(CLAMP ASSY COVERS REMOVED FOR CLARITY)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4617-041" AND BATCH NUMBER PER QSI 044 6.6
- 7) WEIGHT: 6.44 lbs

RELEASED
2016-10-18
ENR 16-630

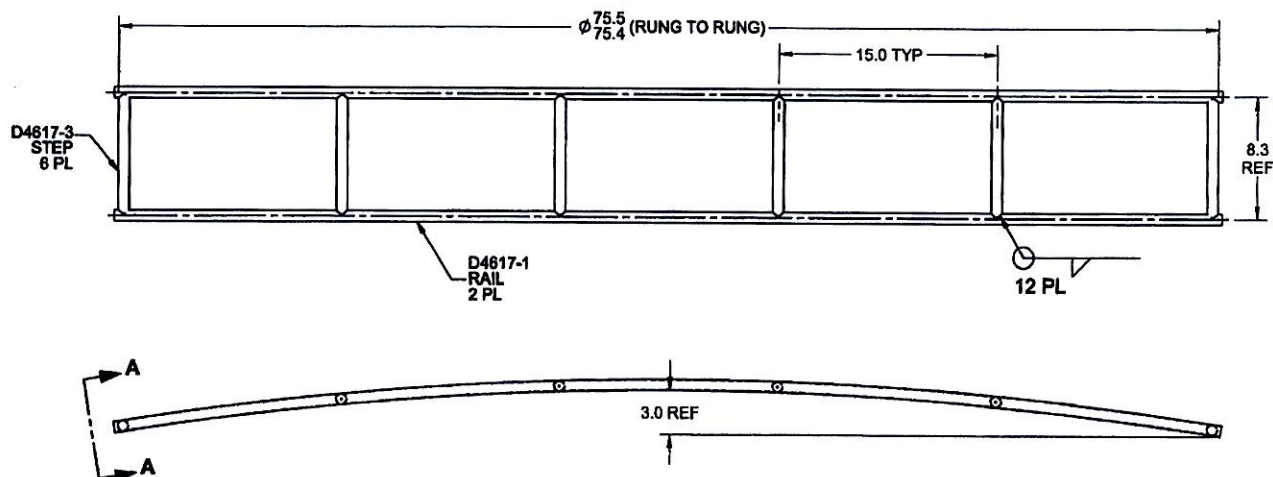
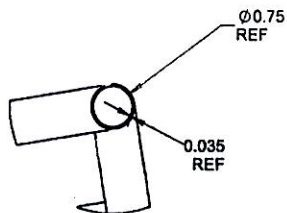
APPROVED

C	ADD D4617-049-0 AND D4618-043; QTY(2) D4617-045 AND D4618-041 WERE QTY(4); ADD 0.06 X 45° CHAMFER TO D4617-51-7. REASON: PAR18-542.	MB	16.08.25
B	75.4-75.5 WAS 75.7 (C4-2) WASHER WAS NAS1149C0463R, QTY 3 ON SHT 4.	RP	12.05.01
A	NEW ISSUE	RP	12.04.02
REV.	DESCRIPTION	BY	DATE
DESIGN	RP		
DRAWN	MB		
CHECKED	AJS		
MFG. APPR.	JLM		
APPROVED	WM		
DE APPR.	DS		
DATE	16.08.25		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4617**
TITLE **EMERGENCY ESCAPE LADDER**
REV. C
SHEET 1 OF 7
SCALE
NTS

COPYRIGHT © 2012 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



D4617-043 LADDER WELDMENT

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: PER DART QSI044 6.6
- 7) WEIGHT: 4.5 lbs
- 8) WELDING: PER DART QSI 004

RELEASED
2016-10-18

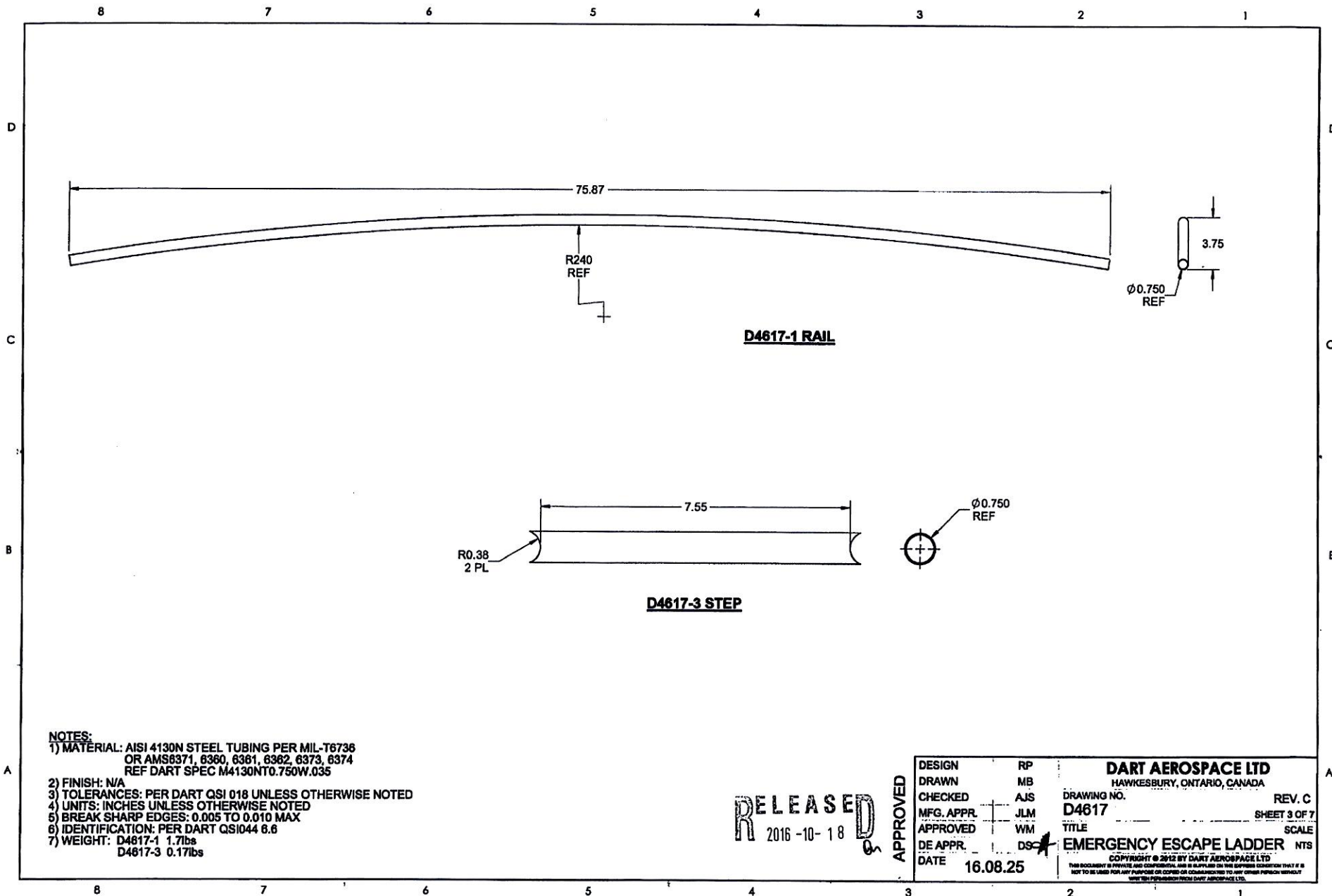
APPROVED

DESIGN
DRAWN
CHECKED
MFG. APPR.
APPROVED
DE APPR.
DATE 16.08.25

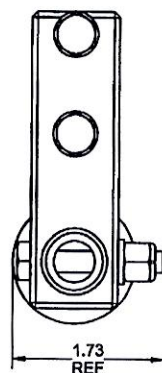
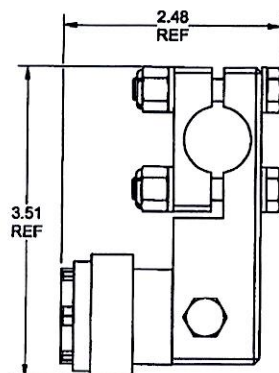
RP
MB
AJS
JLM
WM
DS

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO. **D4617**
TITLE **EMERGENCY ESCAPE LADDER**
REV. C
SHEET 2 OF 7
SCALE
NTS

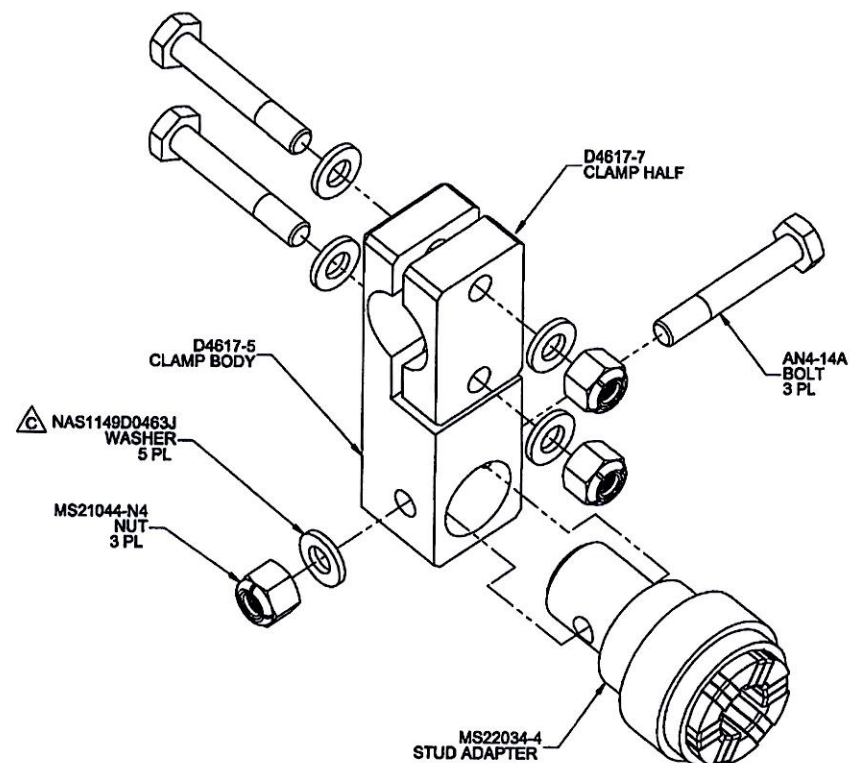
COPYRIGHT © 2012 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE REPRODUCED FOR ANY PURPOSE OR COPIED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE LTD.



ITEM	QTY	P/N	DESCRIPTION
	X	D4617-045	CLAMP ASSEMBLY
1	1	D4617-5	CLAMP BODY
2	1	D4617-7	CLAMP HALF
3	3	AN4-14A	BOLT
4	3	MS21044-N4	NUT
5	1	MS22034-4	STUD ADAPTER
6	5	NAS1149D0463J	WASHER



D4617-045 CLAMP ASSY



NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: PER DART QSI044 6.6
- 7) WEIGHT: 0.5 lbs

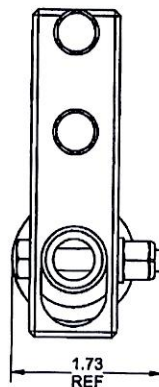
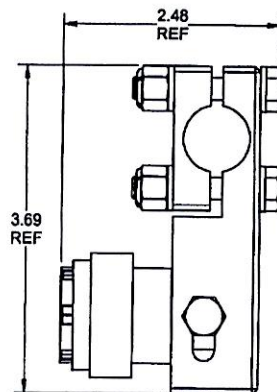
RELEASED
2016-10-18

APPROVED

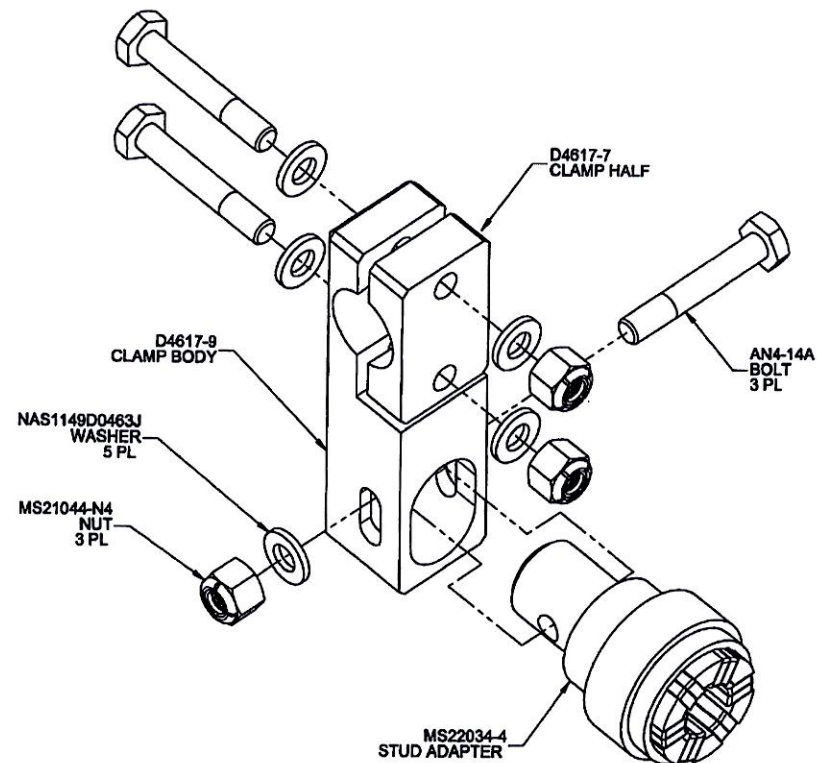
DESIGN	RP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D4617 TITLE EMERGENCY ESCAPE LADDER DATE 16.08.25	REV. C
DRAWN	MB		SHEET 4 OF 7
CHECKED	AJS		SCALE
MFG. APPR.	JLM		NTS
APPROVED	WM		
DE APPR.	DS		

COPYRIGHT © 2012 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD

ITEM	QTY	P/N	DESCRIPTION
	X	D4617-049	CLAMP ASSEMBLY
1	1	D4617-7	CLAMP HALF
2	1	D4617-9	CLAMP BODY
3	3	AN4-14A	BOLT
4	3	MS21044-N4	NUT
5	1	MS22034-4	STUD ADAPTER
6	5	NAS1149D0463J	WASHER



D4617-049 CLAMP ASSY



NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: PER DART QSI044 6.6
- 7) WEIGHT: 0.5 lbs

RELEASED
2016-10-18

APPROVED

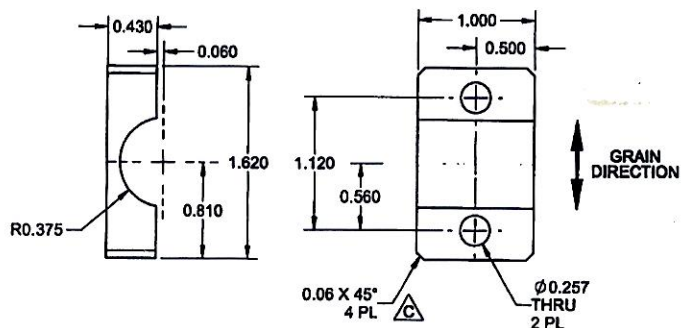
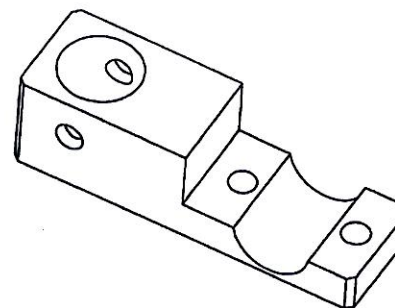
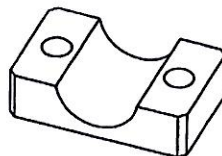
DESIGN
DRAWN
CHECKED
MFG. APPR.
APPROVED
DE APPR.
DATE

RP
MB
AJS
JLM
WM
DS

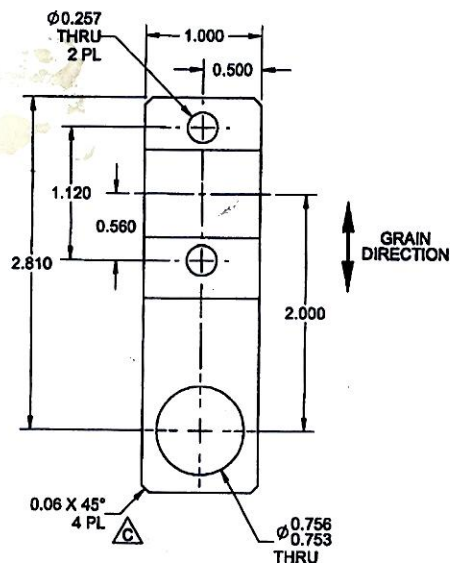
DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO.
D4617
TITLE
EMERGENCY ESCAPE LADDER
REV. C
SHEET 5 OF 7
SCALE
NTS
COPYRIGHT © 2012 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRELIMINARY AND NOT TO BE USED FOR ANY PURPOSE OR CONSIDERED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD

16.08.25

8 7 6 5 4 3 2 1



D4617-7 CLAMP HALF



D4617-5 CLAMP BODY

NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR
AMS 4117/4128/4115/4116 OR QQ-A-200/8
OR ASTM B211 OR ASTM B221
REF DART SPEC M8081T88
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER DART QSI 044 6.6 OR 6.7
- 7) WEIGHT: D4617-5 0.16 lbs
D4617-7 0.05 lbs
- 8) POSSIBLE SUPPLIER: D4617-5: EAGLE P/N 212-110-06
D4617-7: EAGLE P/N 212-110-07

RELEASED
2016-10-18

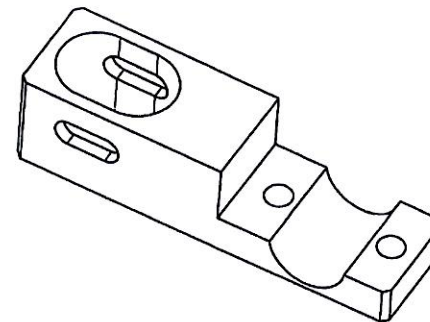
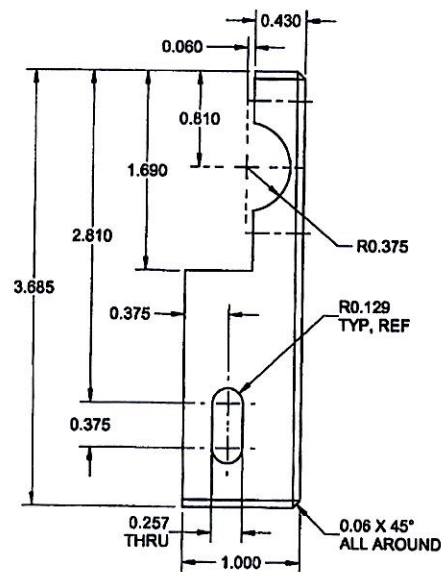
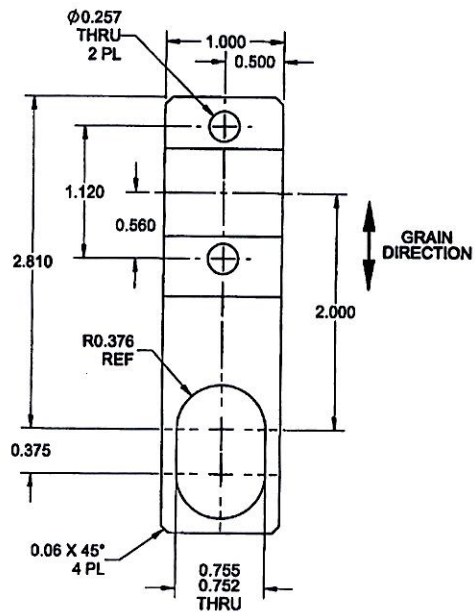
APPROVED

DESIGN
DRAWN
CHECKED
MFG. APPR.
APPROVED
DE APPR.
DATE

RP
MB
AJS
JLM
WM
DS

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO.
D4617
TITLE
EMERGENCY ESCAPE LADDER
REV. C
SHEET 8 OF 7
SCALE
NTS
COPYRIGHT © 2012 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE LTD.

8 7 6 5 4 3 2 1



D4617-9 CLAMP BODY

NOTES:

- 1) MATERIAL: 6061-T6/6051/60511/6052 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR
AMS 4117/4128/4116/4118 OR QQ-A-200/8
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER DART QSI 044 6.6 OR 6.7
- 7) WEIGHT: 0.16 lbs

RELEASED
2016-10-18

APPROVED

DESIGN
DRAWN
CHECKED
MFG. APPR.
APPROVED
DE APPR.
DATE

RP
MB
AJS
JLM
WM
DS

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO.
D4617
TITLE
EMERGENCY ESCAPE LADDER
REV. C
SHEET 7 OF 7
SCALE
NTS

COPYRIGHT © 2012 BY DART AEROSPACE LTD
THIS DOCUMENT IS PROPRIETARY AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE LTD.